

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

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**MINUTES FROM THE ADVISORY COMMITTEE
MEETING FOR TITLE 8, SECTION 4954**

Hydraulic Cranes & Excavators
Wednesday, February 27, 2008
Sacramento, California

The meeting was called to order by the Chairman, Hans Boersma, Senior Engineer-Standards, Occupational Safety and Health Standards Board (Board) at approximately 10:00 a.m., Ms. Bernie Osburn, Staff Services Analyst was present to provide assistance. Marley Hart, the Board's Executive Officer and Mike Manieri, the Board's Principal Engineer were also present. Larry McCune, Principal Engineer and Patrick Bell, Senior Safety Engineer represented the Division of Occupational Safety and Health (Division).

The Chairman reviewed the Board's policy and procedures regarding the goals, objectives and use of advisory committees, and the Administrative Procedures Act requirements that must be considered during the rulemaking process. The Chairman stated that the Division had requested the Board to amend Section 4954 by adding a standard to address the hazard of being struck by or caught between hydraulic cranes and excavators and other objects at the work site. The Chairman clarified that the committee meeting's purpose was to determine the necessity for the proposal and if a standard was needed, to determine appropriate regulatory language that would be clear, and not duplicative of existing Title 8 standards. The Chairman asked Mr. McCune to make a brief presentation regarding the issues that lead to the Division's request.

Mr. McCune stated that the proposed amendment of Section 4954 would ensure that employees working or walking near the hydraulic cranes and excavators are protected from inadvertent contact. Mr. McCune stated that numerous employees have been injured and killed by being struck by or caught between hydraulic cranes and excavators. Mr. McCune stated that the regulatory language of the proposal would ensure greater employee awareness of the hazards surrounding them when working near excavators and hydraulic cranes. Such awareness would ultimately result in avoidance of inadvertent contact accidents associated with the excavator and crane operations.

The Chairman reviewed both California and Federal accident data with the committee and asked the committee to consider the data to determine the need for the proposed amendments to Section 4954 of the General Industry Safety Orders, and called upon the committee members and attendees to provide input and comment regarding the proposal.

Mr. Guy Prescott, Operating Engineer of Local No. 3, stated that it would not be reasonable to make the excavator operator responsible for the safety of workers at the construction site. Additionally, Mr. Prescott suggested removing hydraulic cranes from the proposed section because existing crane requirement already address this issue. Mr. Prescott expressed concern about the

proposed requirement for “delineation,” and that barricading an area that is constantly moving as the excavator moves would be not be practical. Mr. Prescott also opined that training employees is an effective means of preventing accidents and suggested that the safe practices for excavator operations could be included in the contractor’s “Code of Safe Practices” pursuant to Section 1509(b).

Mr. Don Bradway, Monarch-Kreis Insurance Services, agreed with Mr. Prescott, echoing that the responsibility for site safety related to the hydraulic crane and excavator operations should not be the responsibility of the operator. Additionally, Mr. Bradway stated that the practice of making eye contact with the operator when approaching excavators is long recognized as an effective means to prevent these types of accidents and is more practical than requiring operator approval. Mr. Bradway stated that education and training should play a prominent role in preventing these types of accidents.

Ms. Tara McGovern, Director of Government Relations, Engineering & Utility Contractors Association, stated that the proposal’s intention is good, however, when analyzing the effects of its implementation, the proposed regulation would expose the employees to greater hazards, as workers have to move barricades or markers to accommodate the constantly relocating excavator. Additionally, Ms. McGovern opined that because the proposed rulemaking would duplicate existing injury and illness prevention requirements, there is no necessity for the rulemaking proposal. Ms. McGovern opined that the proposal does not meet APA requirements and should not go forward.

Mr. McCune stated that when employees are working near the excavators where they could be struck by or caught between the excavators and other objects, delineation of the danger zone would bring awareness of the contact risk. Mr. McCune stated that communication between the worker in or near the danger zone and the operator is very important.

Mr. Patrick Bell stated that the proposal to require operator approval for employees to approach the excavator is not intended to put the responsibility for the safety of employees on the operators but is to facilitate operator awareness about the location of workers near the excavator. Mr. Bell agreed with Mr. McCune that the communication between operators and workers is important in the prevention of accidents.

Mr. Charlie Haener, Safety Director, Ford Construction Co., questioned how an employer would delineate the danger zone. Mr. Haener opined that installing and then constantly moving the delineation devices every time the excavator has to relocate would expose workers to the hazard that the proposal is intended to control. Therefore, Mr. Haener felt that the proposed regulation seemed to be more dangerous than what is currently required. Additionally, Mr. Haener recommended that these regulations should not include requirements for cranes since their operation and associated hazards is significantly different from that of excavators.

Mr. Claude Fiske, Safety Director, Steve P. Rados Inc., stated that this proposal is problematic because of the many different factors and issues that must be considered at construction sites. Additionally, Mr. Fiske opined that it is not practical to make an operator responsible for workers

entering the danger zone because the operator has no control over these workers. Mr. Fiske stated that the operator is often unable to see workers entering the danger zone due to blind spots and at the back of the excavator. Mr. Fiske suggested that the committee consider all these factors before going forward with the proposed change.

Mr. Bloomstine, Southern California Contractors Association, agreed with Mr. Bradway that safety training, addressing the issues with effective communication and hazard awareness, would be more practical than the proposed amendments. Both agreed that existing Title 8 standards for injury and illness prevention, training, and recordkeeping requirements effectively address the Division's concerns.

Mr. Ralph Armstrong, International Brotherhood of Electrical Workers, Local 1245, agreed with Mr. McCune that delineation of the danger zone and increasing employee awareness of the hazards would be effective in preventing accidents. Mr. Armstrong also agreed with the recommendation to rely on the training and hazard assessment requirements currently in Title 8, Sections 1509 and 3203.

Mr. Edward Garcia, Safety Manager, CC Myers Inc, opined that the existing standards adequately address the safety concerns for excavators and cranes. Mr. Garcia recommended that the proposal not combine the requirements for cranes and excavators, because their operation and associated hazards are significantly different; cranes move much slower than excavators and require more personnel during the operation. Mr. Garcia opined that effective training is essential in addressing the subject hazards.

Mr. Gary Rudy, Safety Officer, Duran & Venables Inc., stated that because all areas of the construction site are dangerous, concentrating on this excavator and crane issue appears misdirected. Mr. Rudy opined that there are many other construction site safety issues far more pressing than the hazards addressed by the proposal.

Mr. Larry Pena, Corporate Safety Manager, Southern California Edison, stated that the suggestion to delineate the hazard zone using spray paints could be problematic because underground utilities are also identified using spray paint. Mr. Pena warned that using spray paints to delineate the danger zones could create confusion about the absence or presence and location of underground utilities and result in serious accidents.

Ms. Nancy Moorhouse, VP, Director of Safety, Teichert Construction Company, stated that controlling hazards posed by the excavators and hydraulic cranes is already addressed by existing standards in Section 3203 and Section 1509. Ms. Moorhouse opined that the proposal is both duplicative and not necessary because the issue is effectively addressed in Title 8, California Code of Regulations.

Mr. Tom Walsh, Risk & Safety Manager, Sully-Miller Contracting Co. agreed with earlier remarks that delineation of the danger zone is not practical, and that the evidence provided in the accident data does not justify the addition of new regulations. Mr. Walsh opined that compliance with

existing standards would address the hazards associated with the operation of excavators and thereby prevent the injuries and fatalities presented in the accident data.

The committee agreed that the requirement to delineate the danger zone is impractical because of the type of equipment under consideration. Defining the danger zone was likewise problematic because of the ever-changing site conditions and the need to constantly move the equipment. The comments indicated that the construction site is by nature dangerous and that employees are constantly reminded and trained to stay away from equipment in operation and not to approach the equipment without first making eye contact with the operator. Many committee members emphasized the importance of proper employee training and its effectiveness in preventing the accidents.

Mr. McCune stated that delineation of the danger zone would not necessarily require barricading or marking the danger zone but should include identification through training and instruction. Mr. McCune opined that the training and instruction would insure that workers understand the hazards and thereby avoid inadvertent contact with the equipment.

Mr. Ray Trujillo, Northern California Director, State Building Trades Council, opined that instead of barricades, delineating the danger zone with caution tape and cones would be a reasonable solution that would create awareness of the hazardous areas associated with the operation of excavator, and that such awareness would prevent accidents.

Ms. Bo Bradley, Director Safety, Health & Regulatory Services, Associated General Contractors of CA, stated that current practices are centered on training and effective supervision. Ms. Bradley stated that employees are made aware of the hazards associated with excavator operations during site-specific training and during preplanning sessions where instruction and duty assignments include safety warnings of hazards associated with hydraulic crane and excavator operations. Ms. Bradley opined that marking the danger zone by painting demarcation lines on the ground would not be effective.

Mr. Greg Rainey, Risk Engineer, O.C. Jones & Sons Inc., stated that he came to the meeting expecting to see justification for this rulemaking proposal in the form of increased accidents. Mr. Rainey stated that the accident data presented did not indicate such an increase and in reality showed a decrease in excavator and crane related accidents in recent years.

The majority of committee members agreed that the intent of the proposal, to increase employee awareness of the subject hazards, is already addressed in Sections 3203 and 1509, and consequently renders the proposal both duplicative and unnecessary. Additionally, committee members stated that the excavator and crane accident reports reviewed at the beginning of the meeting indicated that the employers were often cited for noncompliance with Section 1509 or Section 3203, indicating their employees were probably not well trained. The committee members opined that compliance with the existing standards would control the hazards associated with excavator and hydraulic crane operations.

The Chairman reviewed the written comments received by the Board regarding the proposal.

- 1) Mr. William A. Blum, President, International Training & Safety LLC, 6411 Silent Harbor Drive, Huntington Beach, CA, recommends adding a third party operator training and accreditation requirement for excavator operators.

This recommendation is somewhat outside the scope of the proposal and would require consideration by a separate advisory committee.

- 2) Mr. Gade Mobley, Division Safety Manager, FCI Construction Inc., 2100 Goodyear Road, Benicia, CA, opposes amending Section 4954 because the issues are already addressed in Section 4999(i). Additionally, Mr. Mobley is in favor of amending Title of Group 13, to clarify that it applies to Hydraulic excavators.

No comments were made in response to the written comments. The committee declined to recommend that staff pursue either of these recommendations.

At the conclusion of all comments by those in attendance, the Chairman asked those in favor of the proposal to provide further comments and remarks indicating support of the proposal. Mr. McCune and Mr. Bell were the only attendees expressing such support. The Chairman then requested those in favor of the recommendation to amend Section 1509(b) to specifically address safe practices of excavator operations in the "Code of Safe Practices." No one responded in favor of going forward with this recommendation, or to amend the Code of Safe Practices to include specific procedures for excavators that would address inadvertent contact.

The Chairman summarized the committee findings that a clear consensus had been reached not to go forward with the proposal to amend Section 4954 that would have required employers to delineate the area where there is a hazard of contact with moving cranes or boom-type excavators, instruct employees about such hazards, and require persons to get permission from the operator to enter the hazard zone.

There being no further comments or questions, the Chairman adjourned the meeting at approximately 11:45 a.m.